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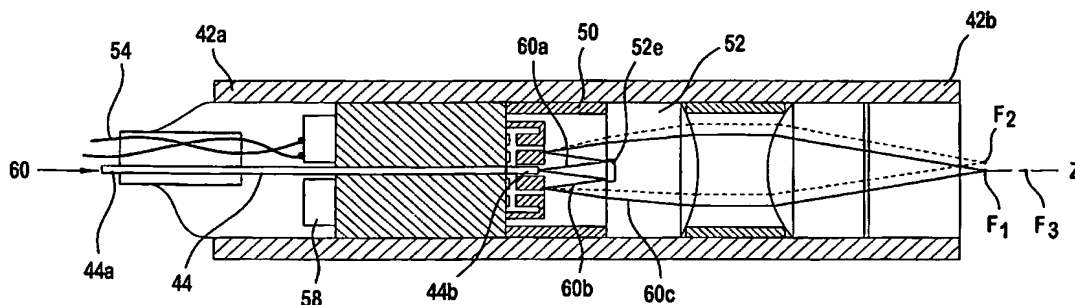
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(54) Title: **MINIATURE CONFOCAL OPTICAL DEVICE, SYSTEM, AND METHOD**



(57) Abstract: A confocal optical device is described. The device includes a tri-axial scanning mirror that can provide for three-dimensional scanning of objects. In particular, the scanning mirror has a deformable reflective membrane mounted on two annular gimbaled members to provide for rotation about two orthogonal axes. The deformable membrane, which can be provided at other suitable locations in the device, is used to control the focusing spot of the light beam transmitted from the device to the object being scanned. Various methods relating to the confocal optical device are also described.